# TABLE OF CONTENTS

# FOOD AND AGRICULTURAL CODE

ARTICLE 1. GENERAL PROVISIONS	1
ARTICLE 2. DEFINITIONS	1
ARTICLE 3. FERTILIZER INSPECTION ADVISORY BOARD	7
ARTICLE 4. LICENSING	7
ARTICLE 5. REGISTRATION	8
ARTICLE 6. INSPECTION FEES	9
ARTICLE 7. TONNAGE REPORTS	9
ARTICLE 8. LABELS	10
ARTICLE 9. INSPECTION, SAMPLING AND ANALYSIS	10
ARTICLE 10. VIOLATIONS	12
ARTICLE 11. PROCEDURE FOR PROSECUTION	13
ARTICLE 12. MISBRANDING AND ADULTERATION	14
CALIFORNIA CODE OF REGULATIONS	
ARTICLE 1. STANDARDS AND LABELINGFertilizing Materials - General Provisions	
Use of Numerals to Describe the Guaranteed Analysis	16
Biotics	20
Fish Emulsion	21
Phosphorus MaterialsSeed and Plant Food Mixture	22
Slow Released Plant Nutrients	23

Gypsum Equivalent	23
ARTICLE 2. SAMPLES	24
Official Samples	
Subsamples	22
Sampling Procedure	22
Identification of Official Sample	26
Description of Sample	
ARTICLE 3. LICENSING	26
Licensing	
Experimental Use of a Fertilizing Material	
ARTICLE 4. REGISTRATION	26
Registration	
ARTICLE 5. TONNAGE REPORTING	27
Tonnage Reporting	

# FOOD AND AGRICULTURAL CODE DIVISION 7, CHAPTER 5. FERTILIZING MATERIALS

# **ARTICLE 1. GENERAL PROVISIONS**

- **14501.** The Legislature finds and declares that it is the intent of this chapter to do all of the following:
- (a) To promote the distribution of effective and safe fertilizing materials essential for the production of food and fiber.
- (b) To provide assurance to the consumer of commercial fertilizers, agricultural minerals, packaged soil amendments, and auxiliary soil and plant substances that the product purchased is properly identified, and to provide assurance of the validity of the quality and quantity represented by the manufacturer of these products.
  - (c) To provide funds for the administration and enforcement of this chapter.
- 14502. The director shall enforce this chapter and adopt and enforce such regulations relating to the manufacture, guaranteeing, labeling, and distribution of, the manner of reporting tonnage for, and making inspection tonnage fee payments upon, fertilizing materials as the director determines necessary to carry out this chapter. A copy of those regulations shall be mailed promptly upon adoption to each person who is licensed pursuant to this chapter. The failure of any licensee to receive a copy of the regulations is not a defense to a violation of the regulations.
- 14503. Any money which is received by the director pursuant to this chapter shall be paid into the State Treasury to the credit of the Department of Food and Agriculture Fund, to be expended solely for the administration and enforcement of this chapter.
- 14504. The director shall prepare an annual statement of the operating expenditures and revenue related to this chapter which shall be presented to the board for review as soon as possible following the termination of the fiscal year. A copy of this statement shall be made available to any interested person upon request.
- 14505. Agricultural products derived from municipal sewage sludge shall be regulated as a fertilizing material pursuant to this chapter, and when used in general commerce, these products are not subject to regulation as a hazardous substance pursuant to Section 28744 of the Health and Safety Code and are not subject to regulation as a waste under Chapter 6.5 (commencing with Section 25100) of Division 20 of the Health and Safety Code.

#### **ARTICLE 2. DEFINITIONS**

14511. "Agricultural liming materials" are agricultural minerals composed of calcium or magnesium compounds, or both, which are capable of neutralizing soil acidity and which are distributed in this state for that purpose.

- 14512. "Agricultural mineral" means any substance with nitrogen (N), available phosphoric acid ( $P_2O_5$ ), and soluble potash ( $K_2O$ ), singly or in combination, in amounts less than 5 percent which is distributed for farm use, or any substance only containing recognized essential secondary nutrients or micronutrients in amounts equal or greater than minimum amounts specified by the director, by regulation, and distributed in this state as a source of these nutrients for the purpose of promoting plant growth. It shall include gypsum, liming materials, manure, wood fly ash, sewage sludge not qualifying as commercial fertilizer, and captured dilute solutions.
- 14513. "Auxiliary soil and plant substance" means any chemical or biological substance or mixture of substances or device distributed in this state to be applied to soil, plants, or seeds for soil corrective purposes; or which is intended to improve germination, growth, yield, product quality, reproduction, flavor, or other desirable characteristics of plants; or which is intended to produce any chemical, biochemical, biological, or physical change in soil; except that it shall not include commercial fertilizers, agricultural minerals, economic poisons, soil amendments, or manures. It shall include the following:
  - (a) Synthetic polyelectrolytes.
  - (b) Lignin or humus preparations.
  - (c) Wetting agents to promote water penetration.
  - (d) Bacterial inoculants.
  - (e) Microbial products, including genetically engineered microorganisms.
  - (f) Soil binding agents.
  - (g) Biotics.
- (h) Any similar product intended to be used for influencing soils, plant growth, or crop or plant quality.
- 14514. "Biotics" means all materials for which claims are made relating to organisms, enzymes, or organism by-products.
  - 14515. "Board" means the Fertilizer Inspection Advisory Board.
- 14516. "Brand" means any term, design, or trademark used in connection with a fertilizing material product.
- 14517. "Bulk material" means fertilizing materials distributed in nonpackaged form or in a container containing more than 50 kilograms or 110 pounds.
- 14518. "Business location" means any place where fertilizing materials are sold or stored for later sale, except storage of package materials on premises operated exclusively as a public warehouse.

- 14519. "Captured dilute solutions" means solutions that contain low levels of plant nutrients as a result of equipment rinsing and runoff.
- **14520.** "Chelates" means compounds, usually organic, which can combine with a metal ion and form a ring structure between a portion of the chelating agent molecule and the metal.
- 14521. "Chelated plant nutrients" means compounds of metallic secondary nutrients and micronutrients with organic chelating agents which have the property of being available under pH conditions in which the nutrients normally form insoluble compounds.
- 14522. "Commercial fertilizer" means any substance which contains 5 percent or more of nitrogen (N), available phosphoric acid ( $P_2O_5$ ), or soluble potash ( $K_2O$ ), singly or collectively, which is distributed in this state for promoting or stimulating plant growth. "Commercial fertilizer" includes both agricultural and specialty fertilizers. "Specialty fertilizers" may contain less than 5 percent nitrogen (N), available phosphoric acid ( $P_2O_5$ ), or soluble potash ( $K_2O$ ), singly or collectively.
- **14523.** "Common carrier" means a company licensed with the Public Utilities Commission that hauls for hire.
  - 14524. "Complex" means bonding which includes both of the following:
- (a) "Natural organic complexes" means organic by-products of the wood pulp and other industries, such as the lignin sulfonates and polyflavinoids, that form complexes with metallic secondary nutrients and micronutrients. "Natural organic complexes" do not include synthetic chelates in that natural organic complex, generally known as the natural organic chelates which are polymers, for which the nature of the metallic bonding is not known.
- (b) "Inorganic complexes" include inorganic cations which form coordinate chemical bonds with other inorganic cations, anions, or neutral molecules, such as where metal-ammonia complexes of zinc or ammonia are coordinately bonded to the metal cation, and which usually reacts differently than the metal alone in solutions, but dissociates in soil and reacts as the uncomplexed cation.
  - 14525. "Compost" means a biologically stable material derived from the composting process.
- 14526. "Composting" means the biological decomposition of organic matter which inhibits pathogens, viable weed seeds, and odors. "Composting" may be accomplished by mixing and piling in a way as to promote aerobic or anaerobic decay, or both.
- **14527.** "Derivation statement" means the sources of all guaranteed primary nutrients or secondary nutrients, or both, and micronutrients.
- 14528. "Discontinued manufacturing" means an auxiliary soil and plant substance, packaged agricultural mineral, packaged soil amendment, and specialty fertilizer that is no longer manufactured, but is still offered for sale.

- 14529. "Distribute" means to sell, offer, expose for sale, exchange, barter, or otherwise supply products for use in, or shipment within or into, this state.
- 14530. "Distributor" means any person who imports or consigns a fertilizing material or who offers for sale, sells, barters, or otherwise supplies this product for use in, or shipment within or into, this state.
- 14531. "Experimental use" means any application of a fertilizing material which is not offered for sale, has no commercial value, and is for the sole purpose of obtaining scientific data.
- 14532. "Farm use" means that the material is used primarily for application to crops produced for commercial value.
- 14533. "Fertilizing material" means any commercial fertilizer, agricultural mineral, auxiliary soil and plant substance, or packaged soil amendment.
- 14534. "Fish emulsion" means fertilizing material from which the guaranteed nutrients are derived primarily from fish, which contains a minimum of 40 percent total solids from fish, and which may contain additional sources of nitrogen, available phosphoric acid, and soluble potash for standardization purposes or stabilization purposes, or for both purposes, that shall be included in the required guaranteed analysis and derivation statement.
- 14535. "Grade" means the percentage of total nitrogen, available phosphoric acid, and soluble potash stated in the same terms, order, and percentage as the guaranteed analysis.
- 14536. "Guaranteed analysis" means the minimum percentage of primary or secondary plant nutrients or micronutrients, or both, claimed.
- **14537.** (a) "Gypsum" means calcium sulfate dihydrate, a mineral used in the fertilizer industry as a source of calcium and sulfur which is also known as landplaster.
- (b) "Phosphatic sulfate gypsum" means a by-product of calcium dihydrate from the manufacture of phosphoric acid, also known as phosphogypsum.
- 14538. "Hydroponics" means a system in which water soluble primary or secondary plant nutrients or micronutrients, or combination thereof, are placed in intimate contact with the plant's root system, being grown in a water or an inert supportive medium which supplies physical support for the roots but which does not add or subtract primary or secondary plant nutrients or micronutrients, or both.
- 14539. "Investigational allowance" means an allowance for variation inherent in the taking, preparation, and analysis of an official sample of fertilizing materials.

- 14540. "Label" means the display of all written, printed, or graphic matter on the immediate container of, or a statement, including the guaranteed analysis, accompanying fertilizing material.
- **14541.** "Label guarantor" means the manufacturer's or person's name appearing on the label of a fertilizing material.
- 14542. "Labeling" means all written, printed, or graphic matter on, accompanying, or used in promoting the sale of any fertilizing material, including advertisements, brochures, posters, and television and radio announcements.
  - 14543. "Licensee" means a person who has obtained a license pursuant to this chapter.
- **14544.** "Manufacturer" means a person who produces, sells, or distributes a fertilizing material in this state that bears their company name on the label and is the guarantor.
- 14545. "Manure" means any substances composed primarily of animal excrement, plant remains, or mixtures of those substances.
- 14546. "Micronutrients" means boron, chlorine, cobalt, copper, iron, manganese, molybdenum, sodium, or zinc, alone or in any combination.
- **14547.** "Mixed fertilizer" is a commercial fertilizer containing any combination or mixture of fertilizing materials.
- 14548. "Natural organic fertilizer" means materials derived from either plant or animal products containing one or more nutrients other than carbon, hydrogen, and oxygen, which are essential for plant growth, which may be subjected to biological degradation processes under normal conditions of aging, rainfall, sun-curing, air drying, composting, rotting, enzymatic, or anaerobic/aerobic bacterial action, or any combination of these, which shall not be mixed with synthetic materials or changed in any physical or chemical manner from their initial state except by physical manipulations such as drying, cooking, chopping, grinding, shredding, or pelleting.
- 14549. "Noncommercial use" means materials used primarily for application to lawns, shrubbery, flowers, trees, or where there is no crop for commercial value or economic purpose, excluding golf courses, cemeteries, and nurseries.
- 14550. "Official sample" means any sample of fertilizing material taken by an agent of the department and designated as "official" by the department.
- 14551. "Packaged" means a fertilizing material distributed in packaged form or in a container containing equal to or less than 50 kilograms or 110 pounds.

- 14552. "Packaged soil amendment" means any substance distributed for the purpose of promoting plant growth or improving the quality of crops by conditioning soils solely through physical means. It includes all of the following:
  - (a) Hay.
  - (b) Straw.
  - (c) Peat moss.
  - (d) Leaf mold.
  - (e) Sand.
  - (f) Wood products.
- (g) Any product or mixture of products intended for use as a potting medium, planting mix, or soilless growing media.
  - (h) Manures sold without guarantees for plant nutrients.
- (i) Any other substance or product which is intended for use solely because of its physical properties.
  - 14553. "Percent or percentage" means percentage by weight.
- 14554. "Person" means individual, partnership, association, firm, or corporation who assumes responsibility for the product.
- 14555. "Plant" means any business location where fertilizing materials are manufactured, sold, or stored for later sale, except storage of packaged materials on premises operated exclusively as a public warehouse.
- 14556. "Primary plant nutrient" means nitrogen (N), available phosphoric acid ( $P_2O_5$ ), or soluble potash ( $K_2O$ ).
- 14557. "Provisional registration" means that under certain circumstances, a label for renewal on an auxiliary soil and plant substance, packaged agricultural mineral, packaged soil amendment, or specialty fertilizer, alone or in any combination, may be registered for a limited period of time while labels are being corrected and reprinted.
- 14558. "Registrant" means any person who has registered a packaged agricultural mineral, auxiliary soil and plant substance, packaged soil amendment, or specialty fertilizer.
- 14559. "Secondary plant nutrient" means calcium, magnesium, or sulfur, alone or in any combination.
- **14560.** "Sewage sludge" means the solid material resulting from the treatment of waste water of residential or municipal sewage systems.
- 14561. "Soil conditioners" means polyelectrolytes, such as complex vinyl and acrylic compounds and certain cellulose and lignin derivatives, which tend to agglomerate soil colloids and

produce a crumb structure in the soil and increase the permeability of the soil to air and water and increase its resistance to crusting when it dries out.

- 14562. "Soilless growing medium" means a medium of an inorganic substance, such as sand or gravel, or in a soilless organic material such as sphagnum peat or pine bark, and periodically watered with a primary or secondary plant nutrient or micronutrient solution, or both.
- 14563. "Specialty fertilizer" means packaged commercial fertilizer labeled for home gardens, lawns, shrubbery, flowers, and other similar noncommercial uses. These products may contain less than 5 percent nitrogen (N), available phosphoric acid ( $P_2O_5$ ), or soluble potash ( $K_2O$ ), singly or collectively, detectable by chemical methods.
  - 14564. "Ton" means a net weight of 2,000 pounds avoirdupois.

# ARTICLE 3. FERTILIZER INSPECTION ADVISORY BOARD

- 14581. There is, in the department, a Fertilizer Inspection Advisory Board consisting of nine persons appointed by the director, eight of whom shall be licensed under this chapter and subject to the payment of the inspection fee in accordance with this chapter, and one of whom shall be a public member. The members of the board shall receive no compensation, but are entitled to payment of necessary traveling expenses in accordance with the rules of the Department of Personnel Administration. These expenses shall be paid out of appropriations made to the department pursuant to this chapter.
- 14582. The term of office of a member of the board is three years. The initial board shall consist of, three members appointed for a term of three years, three members appointed for a term of two years, and three members appointed for a term of one year. Thereafter, the appointments shall be for full three-year terms. Vacancies shall be filled for the duration of an unexpired term.
- 14583. The board shall be advisory to the director and may make recommendations on all matters pertaining to this chapter including, but not limited to, the inspection and enforcement program, research and education, the annual budget, necessary fees to provide adequate inspection services, and regulations required to accomplish the purposes of this chapter.
  - **14584.** The board shall elect a chairperson and other officers as it deems advisable.
- 14585. The board shall meet at the call of the chairperson or the director, or at the request of any five members of the board. The board shall meet at least once a year.
- 14586. The director shall accept the recommendations of the advisory board pertaining to subdivision (b) of Section 14611 if he or she finds them to be practicable and in the interests of the fertilizer industry and the public. If the director does not accept the recommendations of the advisory board, or any part thereof, the director shall provide the board with a written statement

within 15 working days of making his or her decision stating the reasons for not accepting the recommendations, or any part thereof.

# **ARTICLE 4. LICENSING**

- 14591. Every person who manufactures or distributes fertilizing materials shall, before he or she engages in the activity, obtain a license from the director for each plant and business location which he or she operates. All licenses shall be renewed in January of each odd-numbered year, and shall be valid until December 31 of the following even-numbered year, if issued in January of that same year. However, a person who only distributes or who makes retail sales of packaged agricultural minerals, packaged commercial fertilizers, packaged soil amendments, or packaged auxiliary soil and plant substances, alone or in any combination, which bear the registered label of another licensed person, is not required to obtain the license. The license fee shall not exceed two hundred dollars (\$200). The director may, based on the findings and recommendation of the board, reduce the license fee to a lower rate that provides sufficient revenue to carry out this chapter.
- 14592. A violation of this article is an infraction punishable by a fine of not more than five hundred dollars (\$500). A second or subsequent violation of this article is a misdemeanor punishable by a fine of not less than one hundred dollars (\$100) and not more than one thousand dollars (\$1000).
- 14593. The license shall expire on December 31, of an even-numbered year. Each application for renewal shall be accompanied by a fee not to exceed two hundred dollars (\$200) for each plant or business location which a person operates. If a license is not renewed within one calendar month following expiration, a penalty of fifty dollars (\$50) shall be added to the fee and an additional penalty of fifty dollars (\$50) shall be added for each succeeding calendar month the business location remains unlicensed. The total penalty, however, shall not exceed 100 percent of the original amount due.

#### **ARTICLE 5. REGISTRATION**

14601. Each differing label, other than weight or package size, such as changes in the guaranteed analysis, derivation statement, or anything that implies a different product, for specialty fertilizer, packaged agricultural mineral, auxiliary soil and plant substance, and packaged soil amendment shall be registered. All registrations shall be renewed in January of an even-numbered year, and shall be valid until December 31 of the following odd-numbered year, if issued in January of that same year. The registration fee shall not exceed two hundred dollars (\$200) per product. The director may, based on the finding and recommendation of the board, reduce the registration fee to a lower rate that provides sufficient revenue to carry out this chapter. The director may require proof of labeling statements and other claims made for any specialty fertilizer, agricultural mineral, packaged soil amendment, or auxiliary soil and plant substance, before the director registers any such product. As evidence of proof, the director may rely on experimental data, evaluations, or advice furnished by scientists, including scientists affiliated with the University of California, and may

accept or reject additional sources of proof in the evaluation of any fertilizing material. In all cases, experimental proof shall relate to conditions in California under which the product is intended for use.

The director, after hearing, may cancel the registration of, or refuse to register, any specialty fertilizer, packaged agricultural mineral, packaged soil amendment, or auxiliary soil and plant substance, which the director determines is detrimental or injurious to plants, animals, public safety, or the environment when it is applied as directed, which is known to be of little or no value for the purpose for which it is intended, or for which any false or misleading claim is made or implied. The director may cancel the registration of any product of any person who violates this chapter.

The proceedings to determine whether to cancel or refuse registration of any of those products shall be conducted pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code. The director shall have all the powers that are granted pursuant to Chapter 5.

- 14602. A violation of this article is an infraction punishable by a fine of not more than five hundred dollars (\$500). A second or subsequent violation of this article is a misdemeanor punishable by a fine of not less than one hundred dollars (\$100) and not more than one thousand dollars (\$1000).
- 14603. The registration shall expire on December 31, of an odd-numbered year. Each application for renewal shall be accompanied by a fee not to exceed two hundred dollars (\$200) for each product label. If a registration is not renewed within one calendar month following expiration, a penalty of fifty dollars (\$50) per product label shall be added to the fee.

#### ARTICLE 6. INSPECTION FEES

- 14611. (a) Any licensee whose name appears on the label who sells or distributes bulk fertilizing materials, as defined in Sections 14517 and 14533, to unlicensed purchasers, shall pay to the director an assessment not to exceed two mills (\$0.002) per dollar of sales for all fertilizing materials. Any licensee whose name appears on the label of packaged fertilizing materials, as defined in Sections 14551 and 14533, shall pay to the director an assessment of not to exceed two mills (\$0.002) per dollar of sales. The director may, based on the finding and recommendation of the board, reduce the assessment rate to a lower rate that provides sufficient revenue to carry out this chapter.
- (b) In addition to the assessment provided in subdivision (a), the director may impose an assessment in an amount not to exceed one mill (\$0.001) per dollar of sales for all sales of fertilizing materials, to provide funding for research and education regarding the use and handling of commercial and organic fertilizers, including, but not limited to, any environmental effects.
- 14612. Each licensee shall maintain in this state, or with the director's permission at another location, an accurate record of all transactions subject to assessment. These records shall be maintained for a period of not less than three years following the transaction and are subject to audit by the director.

14613. The payment required by Section 14611, together with a form containing information prescribed by the director, shall be made quarterly within one calendar month after March 31, June 30, September 30, and December 31 of each year, and that form shall be submitted on or before those dates even if no fertilizer materials are sold. For any delinquency in making the payment, or any deficiency in payment, the director shall add a penalty of 15 percent to the delinquent payment. Any delinquency which is more than 90 days past due is a cause for cancellation of the license.

# **ARTICLE 7. TONNAGE REPORTS**

- 14621. The last licensee selling or distributing fertilizing material shall submit a tonnage report, on a form or a computer printout format approved by the director, containing information on shipments received or deliveries made during specified periods designated by the director.
- 14622. The director shall publish, at least annually, a tonnage report. The director shall distribute the report and may charge a fee to cover the actual cost of publishing and distributing the report.

Any information furnished to the director under this chapter shall not be disclosed in such a way as to divulge the business practices of any licensee.

14623. The tonnage report shall be submitted to the director semiannually not later than January 31 and July 31 of each year. The director shall impose a penalty in the amount of two hundred dollars (\$200) on any person who does not submit the report on or before those dates.

#### ARTICLE 8. LABELS

- 14631. Every lot, parcel, or package of fertilizing material distributed into or within this state shall have attached to it, or the shipment shall be physically accompanied by, a label as required by the director, by regulation. The director may require proof of labeling statements and claims made for any fertilizing material. As evidence of proof, the director may rely on experimental data, evaluations, or advice furnished by scientists, including scientists affiliated with the University of California, and may accept or reject additional sources of proof. The director may cancel the approval of, or refuse to approve, a fertilizing material label if the director determines that adequate proof of label claims do not exist. The director, after hearing, may cancel the license of any person who distributes a fertilizing material with a label for which approval has been canceled or a label that has not been approved by the director.
- 14632. The sale or distribution of any lot, parcel, or package of fertilizing material without the label specified in Section 14631 or the regulations adopted pursuant to that section, is an infraction punishable by a fine of not more than two hundred fifty dollars (\$250) if at least one notice of warning has been issued by the director for a prior violation within a 12-month period. A second or subsequent violation of this section within a 12-month period is a misdemeanor punishable by a fine of not less than one hundred dollars (\$100) and not more than one thousand dollars (\$1000).

# ARTICLE 9. INSPECTION, SAMPLING AND ANALYSIS

- 14641. The director shall have free access at reasonable times to all records, premises, or conveyances which are used in the manufacture, transportation, importation, distribution, storage, or application of any fertilizing material.
- 14642. The director shall, at the times and to the extent necessary for the enforcement of this chapter, do all of the following:
  - (a) Take samples of any substance.
  - (b) Make analyses or examinations of any substance.
- (c) Conduct investigations concerning the use, sale, adulteration, or misbranding of any substance.
- 14643. In determining the percentage of component parts of any substance for the purpose of proper labeling, registration, or determining compliance with representations, all analyses shall be made according to a method determined by the director.
- 14644. The director shall publish, at least annually, the results of examinations or chemical analyses of official samples of commercial fertilizer and agricultural minerals, and any additional information the director deems necessary.
- 14645. The director may take a sample for analysis from any lot of fertilizing material which is in the possession of any producer, manufacturer, importer, agent, dealer, or user. The sample shall be taken pursuant to regulations adopted by the director.
  - **14646.** The director shall establish sampling procedures by regulation.
- 14647. Upon the analysis of a sample of fertilizing material, the director shall issue a report showing the findings and indicating that the product has met the guarantee or was found to be deficient. However the director, in determining whether any product is deficient in guarantee or misrepresented, may establish, by regulation, tolerances that provide allowances for variations that occur in the taking, preparation, and analysis of an official sample.
- 14648. In any action, civil or criminal, in any court in this state, a laboratory report from the director which states the results of any analysis, reported to be made pursuant to this chapter, shall be prima facie evidence of all of the following:
  - (a) That the sample which is described in the laboratory report was properly analyzed.
  - (b) That the sample was taken pursuant to this chapter.
- (c) That the substances analyzed contained the component parts which are stated in the laboratory report.
- (d) That the sample was taken from the lots, parcels, or packages which are described in the laboratory report.

- 14649. (a) It is unlawful for the owner of a plant, crop, or commodity to knowingly treat or apply to that plant, crop, or commodity, or cause that plant, crop, or commodity to be treated or applied, with a fertilizer that was stolen or otherwise acquired by illegal means.
- (b) The owner of a crop, who is found by a court to have violated this section, in addition to any other penalties imposed by a court, shall be subject to a fine of ten thousand dollars (\$10,000) plus an amount equal to one-half the value of the crop on which the illegally obtained fertilizer was applied.
- (c) For purposes of this section, "one-half the value of the crop" means one-half the market value of the crop that was actually treated with the illegally obtained fertilizer as determined by the actual sale of the crop or, if the crop is not actually sold, as determined by the director based on an average of the typical market value for such a crop sold in the normal channels of trade in the year in which the crop was produced and in the preceding two years.
- (d) Moneys received as a result of fines and penalties imposed pursuant to this section shall be divided and distributed as follows:
- (1) Fifty percent to the county in which the case was brought to court or in which a court approved settlement of the matter was negotiated.
  - (2) Twenty-five percent to the office of the county agricultural commissioner.
  - (3) Twenty-five percent to the department.
- 14650. (a) Any person who is licensed pursuant to this code and who is found by a court to have knowingly sold, applied, or provided fertilizers that were stolen or otherwise obtained illegally, in addition to any other penalty that may be imposed, shall have his or her license or licenses suspended for a minimum of 18 months.
- (b) This section does not apply to a licensee whose employee or agent is found by a court to have knowingly sold, applied, or provided fertilizers that were stolen or otherwise obtained illegally, unless the licensee had actual knowledge of that conduct.

#### **ARTICLE 10. VIOLATIONS**

- 14651. (a) Unless otherwise specified in this chapter, any violation of this chapter, or the regulations adopted pursuant to this chapter, is a misdemeanor which is punishable by a fine of not more than five hundred dollars (\$500) for the first violation and not less than five hundred dollars (\$500) for each subsequent violation.
- (b) The director may, after hearing, refuse to issue or renew, or may suspend or revoke, a license or registration for any violation of this chapter or any regulation which is adopted pursuant to this chapter.
- (c) Upon calling a hearing, the director shall hand deliver or mail a notice of the hearing to the licensee or registrant specifying the time and place of the hearing at least 10 days prior to the hearing. The hearing officer may do any of the following:
  - (1) Administer oaths and take testimony.
- (2) Issue subpoenas requiring the attendance of the licensee, registrant, or witnesses, together with books, records, memoranda, papers, and all other documents that may be pertinent to the case.

- (3) Compel from the licensee or registrant and any witness the disclosure of all facts known to him or her regarding the case. In no instance shall any employee of the Feed, Fertilizer, and Livestock Drugs Branch serve as the hearing officer in any hearing conducted pursuant to this section.
- (d) Any person who is denied a license, whose license is not renewed, or whose license is suspended or revoked pursuant to this section may appeal to the director.
- 14652. It is unlawful for any person to manufacture or distribute in this state any fertilizing material without complying with this chapter or the regulations adopted pursuant to this chapter.
- 14653. The director may seize and hold any lot of fertilizing material which he or she has reasonable cause to believe is in violation of this chapter or the regulations adopted pursuant to this chapter.
- 14654. If the director seizes any lot of fertilizing material, he or she shall immediately issue a hold order to the person that has control of that material. The director may affix to that lot or package of the material a warning tag which states that the lot is subject to a hold order.
- 14655. (a) Any lot of fertilizing material for which a hold order or notice is issued shall be held by the person having control of the material and shall not be distributed or moved except under the specific directions of the director, pending final disposition pursuant to this chapter. This does not prevent the person who has control of the material from inspecting any seized material or from taking a reasonable sample for evidence while in the presence of a person designated by the director.
- (b) The movement, distribution, or sale of all or part of any product that has been quarantined by the director, unless the movement, distribution, or sale has the prior approval of the director, is a misdemeanor punishable by a fine of not more than five hundred dollars (\$500). A second or subsequent violation of this subdivision is a misdemeanor punishable by a fine of not less than one thousand dollars (\$1000).
- 14656. Upon demand of the person who has control of the seized fertilizing material, and within 10 days of sampling by the director, a subsample shall be returned from the state laboratory to the person in control of the fertilizing material.
- 14657. If the seized and held lot, as determined by the director's analysis, is not in violation of this chapter, the director shall immediately release the seized and held lot and remove the hold order.
- **14658.** If the seized and held lot is found to be in violation of this chapter, the director shall take either of the following actions:
- (a) Continue to hold the lot until such time as the requirements of this chapter have been complied with, at which time the lot shall be released.
  - (b) Issue orders for the disposal of the lot in a manner specified by the director.

14659. The person who has control of a seized or held lot that is found to be in violation of this chapter may appeal the result of the analysis to the director, in writing, within 15 days of receiving the notice of violation. Upon receipt of that appeal, the director shall take a further sample of the lot in question for analysis. The cost of sampling and analysis shall be at the expense of the person who requests the further sample. The findings of the analysis on appeal shall be conclusive.

1460. The authority for the issuance of citations is limited to the violations of Sections 14591, 14601, 14631, 14651, and 14655. The director shall adopt procedures for the issuance of citations and penalties, upon the recommendation of the board. Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code does not apply to the procedures adopted by the director pursuant to this section.

# **ARTICLE 11. PROCEDURE FOR PROSECUTION**

14671. In addition to the remedies provided in this chapter, the department may bring an action in superior court and the court may grant a temporary or permanent injunction restraining any person from violating this chapter or the regulations adopted pursuant to this chapter. Any proceeding under this section shall conform to the requirements of Chapter 3 (commencing with Section 525) of Title 7 of Part 2 of the Code of Civil Procedure. The department shall not, however, be required to allege facts necessary to show or tending to show irreparable damage or loss. The court may require any acts or course of conduct necessary to effectuate the purposes of this chapter.

14672. Nothing in this chapter requires the director to report for prosecution or to institute injunctive proceedings for any minor violation of this chapter whenever the director believes that the public interest would be adequately served by a suitable written notice of warning and compliance with the notice.

# **ARTICLE 12. MISBRANDING AND ADULTERATION**

- **14681.** No person shall distribute misbranded fertilizing materials. A fertilizing material shall be deemed misbranded under any of the following conditions:
  - (a) If its labeling is false or misleading in any particular.
  - (b) If it is distributed under the name of another fertilizing material.
  - (c) If it is not labeled as required by regulations adopted pursuant to this chapter.
- (d) If it purports to be, or is represented as, a fertilizing material, or is represented as containing a primary or secondary plant nutrient or micronutrients, or both, unless the plant nutrients conform to the definition of identity, if any, prescribed by regulation. In adopting these regulations, due regard shall be given to commonly accepted definitions and official fertilizer terms such as those prescribed by the Association of American Plant Food Control Officials.

- **14682.** No person shall distribute an adulterated fertilizing material. A fertilizing material shall be deemed to be adulterated under any of the following conditions:
- (a) If it contains any deleterious or harmful ingredient in sufficient amounts to render it injurious to beneficial plant life when applied in accordance with directions for use on the label, or if adequate warning statements or directions for use which may be necessary to protect plant life are not indicated on the label.
- (b) If its composition falls below or differs from that which it is purported to possess by its labeling.
  - (c) If it contains unwanted crop seed or weed seed.
  - (d) If it is a threat to public safety.

# TITLE 3. CALIFORNIA CODE OF REGULATIONS PLANT INDUSTRY SECTIONS 2300 THROUGH 2326

#### ARTICLE 1. STANDARDS AND LABELING

# 2300. Fertilizing Materials - General Provisions.

(a) Labels of fertilizing materials, shall comply with the requirements of this article.

Efficacy data, which may be required as stated in Sections 14601 and 14631 of the Food and Agricultural Code, is data required to demonstrate the product's effectiveness when used as directed

for all label claims. The data shall be obtained under California environmental use conditions or in areas that have essentially the same environmental use conditions.

- (c) All guarantees shall be based on an Association of Official Analytical Chemists (AOAC) laboratory method or when no AOAC method is available, a method developed for specific analyses by the Department shall be used.
- (d) The guaranteed analysis must be stated on an "as is" basis at time of sale or delivery to wholesale and retail customers.
  - (e) "Zero" guarantees shall not appear in the guaranteed analysis statement.
- (f) Brand names, trademarks and tradenames are prohibited in the derivation statement or list of ingredients. They may appear as part of the product name in an area of the label separate from the list of ingredients or the derivation statement. However, trademarks and tradenames may not be similar to that of a recognized fertilizing material.
- (g) The statement "State of California approved" or other indication of official approval is prohibited in labeling and advertising.
- (h) A warning or caution statement shall appear on the label of any commercial fertilizer product which contains 0.1 percent or more by weight of boron in water soluble form. This statement shall carry the word "WARNING" or "CAUTION" conspicuously displayed, shall state the crop(s) for which the fertilizing material is to be used or state that the use of the fertilizing material on any crops other than those recommended may result in serious injury to the crop(s).
- (i) A warning or caution statement shall appear on the label of any commercial fertilizer product which contains 0.001 percent or more by weight of molybdenum (Mo). This statement shall carry the word "WARNING" or "CAUTION" conspicuously displayed and the statement that the application of fertilizing materials containing molybdenum (Mo) may result in forage crops containing levels of molybdenum (Mo) which are toxic to ruminant animals.
- (j) When the name of a fertilizing material appears on the label, outside of the guaranteed analysis statement, the percentage of that ingredient is required in the guaranteed analysis statement.

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code. Reference: Sections 14501(b) and 14631 of the Food and Agricultural Code.

#### 2301. Use of Numerals to Describe the Guaranteed Analysis.

When any series of numerals are used in labeling of or in advertising to describe the formula or analysis, or in connection with the name, brand, or trademark, such numerals shall be arranged so that the first will be the guaranteed percentage of nitrogen; the second, the guaranteed percentage of available phosphoric acid; and the third, the guaranteed percentage of soluble potash. The guaranteed percentages shall be consistent with the guaranteed analysis.

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

#### 2302. Non-Nutritive Standards.

- (a) Inorganic commercial fertilizer and agricultural mineral products shall not exceed the following standards for the non-nutrient metals arsenic, cadmium and lead:
- (1) For each percent iron, manganese or zinc, the fertilizing material shall not exceed the following concentrations of non-nutrient metals: arsenic, 13 parts per million; cadmium, 12 parts per million; lead, 140 parts per million.
- (2) For each percent available phosphate ( $P_2O_5$ ), the fertilizing material shall not exceed the following concentrations of non-nutrient metals:
- (A) Effective January 1, 2002 through December 31, 2002: arsenic, 4 parts per million; cadmium, 6 parts per million; lead, 20 parts per million.
- (B) Effective January 1, 2003 through December 31, 2003: arsenic, 3 parts per million; cadmium, 5 parts per million; lead, 20 parts per million.
- (C) Effective January 1, 2004: arsenic, 2 parts per million; cadmium, 4 parts per million; lead, 20 parts per million.
  - (3) The concentration limits are applied as follows:
- (A) For micronutrient materials with guaranteed available iron, manganese or zinc, multiply the percentage of guaranteed micronutrient material (Minor Element) by the arsenic, cadmium and lead maximum concentrations as expressed in parts per million (ppm). Example: A 12% Iron product will have the following limits: arsenic, 156 parts per million (13 ppm X 12); cadmium, 144 parts per million (12 ppm X 12); and lead, 1,680 parts per million (140 ppm X 12).
- (B) For phosphate  $(P_2O_5)$  materials, multiply the guaranteed percentage of  $P_2O_5$  by the arsenic, cadmium and lead maximum concentrations as expressed in parts per million (ppm). Example: from January 1, 2002 through December 31, 2002: A guaranteed available 52%  $(P_2O_5)$  phosphate product will have the following limits: arsenic, 208 parts per million (4 ppm X 52); cadmium, 312 parts per million (6 ppm X 52); and lead, 1,040 parts per million (20 ppm X 52).
- (4) For specialty fertilizers that guarantee less than 6% available phosphate ( $P_2O_5$ ) but make no micronutrient claim, the maximum allowable concentrations of non-nutrient metals shall not exceed:
- (A) Effective January 1, 2002 through December 31, 2002: specialty fertilizers shall not exceed: arsenic, 20 parts per million; cadmium, 30 parts per million; and lead, 100 parts per million.
- (B) Effective January 1, 2003 through December 31, 2003: specialty fertilizers shall not exceed: arsenic, 15 parts per million; cadmium, 25 parts per million; and lead, 100 parts per million.
- (C) Effective January 1, 2004: specialty fertilizers shall not exceed: arsenic, 10 parts per million; cadmium, 20 parts per million; and lead, 100 parts per million.
- (5) For specialty fertilizers that guarantee less than 6% available phosphate ( $P_2O_5$ ) and make a micronutrient claim, multiply the guaranteed percentage of micronutrient by the arsenic, cadmium and lead maximum concentrations as expressed in parts per million (ppm) and add the following values to that total:
- (A) Effective January 1, 2002 through December 31, 2002, add: arsenic, 20 parts per million; cadmium, 30 parts per million; and lead, 100 parts per million.
- (B) Effective January 1, 2003 through December 31, 2003, add: arsenic, 15 parts per million; cadmium, 25 parts per million; and lead, 100 parts per million.

- (C) Effective January 1, 2004, add: arsenic, 10 parts per million; cadmium, 20 parts per million; and lead, 100 parts per million.
  - (6) The concentration limits are applied as follows:
- (A) A guaranteed available 3% ( $P_2O_5$ ) phosphate product with 2% guaranteed zinc will have the following limits. Example: from January 1, 2002 through December 31, 2002: arsenic, 46 parts per million (13 ppm X 2 zinc = 26 ppm + 20 ppm); cadmium, 54 parts per million (12 ppm X 2 zinc = 24 ppm + 30 ppm); and lead, 380 parts per million (140 ppm X 2 zinc = 280 ppm + 100 ppm).
- (b) Waste and hazardous waste shall be defined as specified in Title 22, CCR, Division 4.5, Chapter 11 Identification and Listing of Hazardous Waste, commencing with Section 66261.1.
- (c) Recyclable material used in fertilizing material manufacture shall meet all applicable requirements in the Code of Federal Regulations, Chapter 1, Title 40, Part 266, Subpart C Recyclable Materials Used In a Manner Constituting Disposal, commencing with Section 266.20.
- (d) Recyclable material used in fertilizing material manufacture shall be sampled and tested in accordance with procedures specified in Title 22, CCR, Division 4.5, Chapter 11 Identification and Listing of Hazardous Waste, commencing with Section 66261.1.
- (1) A copy of test results shall be submitted to the department for each source of recyclable material used in the manufacture of zinc, manganese or iron products utilized as a base fertilizing material ingredient. Additional test results shall not be required by the department unless the process or operation generating the recyclable material changes.
- (e) No recyclable material may be used in fertilizing material manufacture if its use is denied pursuant to Title 22, CCR, Division 4.5, Chapter 16, Article 8.5 Requirements for Management of Recyclable Materials Used in Agriculture, Section 66266.115.
- (f) No recyclable hazardous waste may be used in fertilizing material manufacture unless the generator of such recyclable hazardous waste complies with Title 22, CCR, Division 4.5, Chapter 16, Article 8.5 Requirements for Management of Recyclable Materials Used in Agriculture, commencing with Section 66266.115.
- (g) By December 31, 2004, the department shall publish a report concerning results of research that evaluates the protectiveness of these regulations on both human health and the environment. Additionally, the report shall include an analysis of and recommendations for regulating cobalt, copper, mercury, molybdenum, nickel, selenium and dioxins.

Authority: Sections 407, 14502 and 14682 of the Food and Agricultural Code.

Reference: Section 14682 of the Food and Agricultural Code.

#### 2303. Labeling Requirements.

The label information for fertilizing materials required by Section 14631 of the Food and Agricultural Code, shall include the following:

- (a) Product name.
- (b) Measurement

- (1) Net weight, of dry materials (for commercial fertilizer, agricultural mineral and auxiliary soil and plant substance labels).
  - (2) Volume (for packaged soil amendments and liquid specialty fertilizers).
  - (3) Density, (pounds per gallon at 68 degrees Fahrenheit), for bulk liquids only.
  - (c) Grade (for commercial fertilizer labels only).
  - (d) The licensee's name and address.
  - (e) Purpose of the product (for packaged soil amendments and specialty fertilizers only).
- (f) Directions for use (for auxiliary soil and plant substances, packaged soil amendments and specialty fertilizers only).
- (g) The statement "NONPLANT FOOD INGREDIENT" printed in capital letters (for auxiliary soil and plant substance products).
- (h) A statement of composition showing the percent of each active ingredient, which is the agent in a product primarily responsible for the intended effects (for auxiliary soil and plant substances).
  - - (2) Secondary and micronutrient guarantee minimums. (if claimed)

Calcium (Ca)	1.0000%
Magnesium (Mg)	0.5000%
Sulfur (S)	1.0000%
Boron (B)	0.0200%
Chlorine (Cl)	0.1000%
Cobalt (Co)	0.0005%
Copper (Cu)	0.0500%
% Chelated Copper	
Iron (Fe)	0.1000%
% Chelated Iron	
Manganese (Mn)	0.0500%
% Chelated Manganese	
Molybdenum (Mo)	0.0005%
Sodium (Na)	0.1000%
Zinc (Zn)	0.0500%
% Chelated Zinc	

(3) Liming material guarantees: (if claimed)

Compound(s) co	omposing material	_%
(state specific co	ompounds)	
Calcium carbona	ate equivalent	_%
Sieve Analysis:	10 mesh	_%
(BULK ONLY)	20 mesh	_%
	40 mesh	_%
	60 mesh	<u>%</u>
Moisture, maxin	num (BULK ONLY)	%

- (4) Other guarantees: (if claimed, and approved by the director)
- (j) A derivation statement (for commercial fertilizers and agricultural mineral labels only).
  - (1) Abbreviations shall not appear in the derivation statement.
- (k) A list of ingredients in decreasing amounts present. (For packaged soil amendments only).
- (l) The following format and guarantees, as applicable for the following products or ingredients, shall appear following the derivation statement of agricultural mineral and commercial fertilizer labels:

# "ALSO CONTAINS NONPLANT FOOD INGREDIENT(S):"

- \_X% Humic Acids (Derived from ... state the source of the humic acids)
- \_\_X% Polymers (state the name of the specific polymer. (For auxiliary soil and plant substances only).

Wetting Agents (state the name of the specific wetting agent on the application only - not required on the label)

- (m) Additional information, other than secondary or micronutrient guarantees, shall not appear in the guaranteed analysis statement.
- (n) The guarantees for the forms of nitrogen must add up to the total nitrogen guarantee claimed and are recommended in the order appearing in the format shown in section 2303(i)(1).
  - (o) Zeros are required before the decimal points when less than one percent.
  - (p) For packaged products, the information found in section 2303(a) through (o) shall either:
    - (1) Appear on the label, or
- (2) Be printed on a tag and attached to the package. This information shall be in a conspicuous form.
- (q) For bulk products, the information found in section 2303(a) through (o) shall be in written or printed form and shall accompany the delivery. This information shall be in a conspicuous form.
- (r) The manufacturer of any base fertilizing material ingredient that claims iron, manganese, zinc or phosphates shall provide a guarantee statement that the product does not exceed standards established for arsenic, cadmium and lead.
- (1) For purposes of the labeling guarantee, base fertilizing material ingredient shall be defined as phosphate, zinc, manganese, or iron products utilized singly or as material ingredient in blended or formulated fertilizing material products. Examples of such base fertilizing material ingredients include, but are not limited to, phosphoric acid, monoammonium phosphate,

diammonium phosphate, zinc oxide, zinc sulfate, zinc from galvanizer skimmings, zinc from electric arc furnace dust, metallic zinc, refined zinc from the copper pickling process, zinc from circuit board recycling, iron II & III oxide, iron ore deposits, iron from recycling of bailing wire, rust or photographic operations, and manganese oxide.

- (2) The guarantee statement shall report in parts per million the maximum total concentration of arsenic, cadmium and lead in the base fertilizing material ingredient.
- (s) Packaged product labels for commercial fertilizer and agricultural mineral products, with the exception of gypsum, liming materials, manure, wood or coal fly ash, sewage sludge, composted products, potting soils, potting mix, blood meal, bone meal, feather meal, kelp meal or seaweed, cottonseed meal, fish meal, sphagnum moss and seed mix shall include either an informational statement of laboratory test results or provide an informational statement providing the maximum levels in parts per million of arsenic, cadmium, cobalt, copper, lead, mercury, molybdenum, nickel and selenium. In lieu of a statement on the label, the information may be provided by either of the following statements:

"Information regarding the contents and levels of metals in this product is available by calling 1-800-XXX-XXXX."

OR

"Information regarding the contents and levels of metals in this product is available on the Internet at <a href="http://www.regulatory-info-xx.com.">http://www.regulatory-info-xx.com.</a>" Each registrant shall substitute a unique alphanumeric identifier for "xx". This statement may be used only if the licensee establishes and maintains the Internet site; there is a clearly visible, direct hyperlink to a government web site; and, the Internet site contains no advertising or company-specific information. A government web site internet address on the label is an acceptable alternative to a web site established and maintained by the licensee.

- (t) Testing methodology for the informational statement of laboratory test results shall conform to either sample preparation method 3050B or 3051 and conform to analysis methods as described in US EPA Publication SW-846 (Revision 3, December 1996), which is hereby incorporated by reference.
- (u) Labeling provisions in Section 2303(r) shall be met no later than January 1, 2002. Labeling provisions in Section 2303 (s) shall be met no later than July 1, 2002, for all products entering into channels of trade.
- (v) The publication of inaccurate information regarding the contents and levels of metals is a misbranding violation pursuant to Section 14681 of the Food and Agricultural Code.

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

#### 2304. Biotics.

All fertilizing materials for which claims are made relating to organisms, enzymes or organisms by-products are auxiliary soil and plant substances and are subject to the registration requirement of

Section 14601 of the Food and Agricultural Code, whether or not the material would otherwise be exempt from registration as a commercial fertilizer. In addition to the information required by Section 14601 of the Food and Agricultural Code, the label of each product which contains organisms, enzymes and other biologically active by-products of organisms for which claims are made shall state:

- (a) Name of each species and strains as part of the statement of composition and name of each by-product, if claimed.
  - (b) (1) The percentage or number of viable units of microorganisms per cubic centimeters.
  - (2) The concentration in percentage of enzymes or other organism by-products claimed.
  - (c) The expiration date for use.
  - (d) Storage conditions.

A generally accepted laboratory method for assaying the viable and attenuated units and the by-products claimed must be submitted with the registration application.

When used for the purpose intended, the product must not be pathogenic to plants or pathogenic to animals which may consume the treated plant. Biotic products such as *Rhizobium* spp., *Gingaspora* spp., *Glomus* spp. and *Pisolithus* spp., are acceptable for registration. Other biotic products are acceptable based on efficacy data.

Authority: Sections 407, 14502, 14601 and 14631 of the Food and Agricultural Code.

Reference: Sections 14601 and 14631

#### 2305. Chelating Agents.

The label of each product for which a chelation claim is made shall state:

- (a) The name of the chelating agent.
- (b) The percent of the guaranteed micronutrient content which is chelated, for example in the following format:

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

#### 2306. Fish Emulsion.

When a product is labeled as fish emulsion, it shall contain a minimum of 40 percent total solids.

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

# 2307. Hydroponics, Continuous Liquid Feed Products and Ready-to-Use Foliar Products.

The minimum percentages acceptable for micronutrients stated in Section 2303, do not apply to guarantees for those water soluble nutrients or micronutrients on products labeled only for hydroponic, continuous liquid feed programs or ready-to-use foliar products.

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

# 2308. Packaged Soil Amendments.

- (a) Packaged soil amendments shall be measured by volume (quarts/cubic feet). If other measurement information is shown, it shall be in parentheses following the volume statement, e.g. weight, cubic inches, fractions of cubic feet and metric conversions.
- (b) No claim shall be made for chemical composition or nutritive constituents, except as provided in (d) and (f) of this section.
- (c) When a packaged soil amendment is labeled as a specific material, such as peat moss or leaf mold, the product shall consist of not less than 95 percent of that material.
- (d) Organic products such as bark, wood chips, wood sawdust and peat or peat moss claimed to be nitrogen fortified, nitrogen stabilized, or with other terms to inform that the product contains nitrogen added to compensate for nitrogen likely to be taken from soil due to the amendments decomposition therein, are soil amendments when such additional nitrogen is 0.5 percent or less. Any claim for such nitrogen stabilization or fortification or similar term made on the label of a packaged soil amendment shall be accompanied by a statement of the total percent of nitrogen contained therein.
  - (e) Packaged soil amendments may contain wetting agents.
- (1) The claim "wetting agent added" can be made without guaranteeing the specific wetting agent or the percentage of such, but the chemical name of the wetting agent must be submitted at the time of registration along with the analytical method.
  - (f) Iron (Fe), may be guaranteed at less than 0.1 percent.
- (g) If reference is made to the acidity or alkalinity of the product, or its influence on the soil, a range or specific pH must be guaranteed.

Authority: Sections 407, 14502, 14601 and 14631 of the Food and Agricultural Code.

Reference: Sections 14601 and 14631 of the Food and Agricultural Code.

#### 2309. Phosphorus Materials.

(a) Products that contain phosphorous acid shall state on the label the percentage of "Total Phosphoric Acid", upon conversion of phosphorous acid.

Total Phosphoric Acid (P<sub>2</sub>O<sub>5</sub>) .....\_\_\_\_%

In addition the label shall state the following:

- (1) Phosphorous acid products are for use as a supplemental fertilizer treatment.
- (2) Upon foliar application, the phosphite ions are taken up directly by the plant foliage and may undergo a degree of conversion to phosphate ions, or will be used directly by plants, as phosphite ions.
- (3) As a soil application to annual crops, a lesser response from the initial crop, with a corresponding superior response from succeeding crops, may be observed. In addition, placement close to seeds or root zones may be injurious to crops. The effect may be aggravated by a soil pH below 6.5.
- (b) Products that contain phosphoric acid shall state on the label the percentage of "Available Phosphoric Acid". If, in addition, a percentage of "Total Phosphoric Acid" is stated, the percentage of "Insoluble Phosphoric Acid" (Citrate-Insoluble Phosphorus) must be stated immediately below, for example:

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

#### 2310. Seed and Plant Food Mixture.

A packaged combination of viable seeds for planting intermixed with nitrogen, available phosphoric acid, or potash, added singly or in combination totaling one percent or less, solely to stimulate the sprouting seeds after planting is not classed as any form of fertilizing material as defined in Section 14533 of the Food and Agricultural Code.

Authority: Sections 407 and 14502 of the Food and Agricultural Code.

Reference: Section 14502 of the Food and Agricultural Code.

#### 2311. Slow Released Plant Nutrients.

- (a) The label shall not state or imply that a plant nutrient or micronutrient contained in a fertilizer is released slowly over a period of time, unless such nutrients or micronutrients are identified and guaranteed.
  - (b) The types of slow released products recognized are:
- (1) Water insoluble (N products only), such as natural organics, urea formaldehyde, isobutylidene diurea and oxamide.
  - (2) Coated slow release such as sulfur coated urea and other encapsulated soluble fertilizers.
  - (3) Products containing water soluble nitrogen such as ureaform materials, urea

formaldehyde products, methylenediurea (MDU), dimethylene triurea (DMTU), dicyanodiamide (DCD).

(4) Occluded slow release, where fertilizers or fertilizer materials are mixed with waxes, resins, or other inert materials and formed into particles.

The terms "water insoluble", "coated slow release", "slowly available water soluble" and "occluded slow release" are accepted as descriptive of these products provided the claim is substantiated by a research study as required by section 2300(b).

- (5) Products containing phosphorous acid such as potassium phosphite and ammonium phosphite which undergo a degree of conversion in plants or soils to available phosphoric acid  $(P_2O_5)$ .
- (c) When slowly released nutrients are less than 15 percent of each total of the guarantee for either total nitrogen (N), available phosphoric acid ( $P_2O_5$ ), or soluble potash ( $K_2O$ ), as appropriate, the label shall not refer to slow release of the materials.
- (d) Association of Official Analytical Chemist's (AOAC) latest method shall be used to confirm the coated slow release and occluded slow release nutrients and others whose slow release characteristics depend on particle size and AOAC latest method shall be used to determine the water insoluble nitrogen of organic materials.

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

# 2312. Gypsum Equivalent.

Any of the following four compounds, singly or in combination, shall be expressed as a percent gypsum equivalent on the label:

Hydrated Calcium Sulfate (CaSO<sub>4</sub>2H<sub>2</sub>O) Anhydride Calcium Sulfate (CaSO<sub>4</sub>) Hydrated Calcium Sulfite Anhydride Calcium Sulfite

Authority: Sections 407, 14502 and 14631 of the Food and Agricultural Code.

Reference: Section 14631 of the Food and Agricultural Code.

# **ARTICLE 2. SAMPLES**

#### 2313. Official Samples.

A sample of fertilizing materials drawn by the director for the purpose of analysis, in accordance with Sections 14641 and 14642 of the Food and Agricultural Code, shall be known as an "official sample" and shall be drawn in a manner prescribed by this article to represent the entire lot from which it is taken.

Authority: Sections 407, 14502 and 14645 of the Food and Agricultural Code.

Reference: Sections 14533 and 14645 of the Food and Agricultural Code.

# 2314. Subsamples.

Subsamples shall be provided to interested parties after laboratory analysis by the department, with the condition that the requesting party agree to provide analytical results of the subsample to the Department of Food and Agriculture, Feed, Fertilizer and Livestock Drug Branch within 21 days of receipt.

Authority: Sections 407, 14502 and 14645 of the Food and Agricultural Code. Reference: Sections 14645 and 14646 of the Food and Agricultural Code.

# 2315. Sampling Procedure.

Each official sample shall consist of at least one pound of dry materials or one pint of liquid material taken in the following manner:

- (a) Packaged Dry Materials.
  - (1) Use a sampler that removes a core diagonally from end-to-end of the container.
  - (2) The lot and the sample size will be established in the following manner:

Lot Size Containers	Sample Size Containers
Less than 5	All
6-15	5
16-30	6
31-60	7
61-100	8
101-200	9
201-300	10
301-500	11
501 or more	12

- (3) Small packages of dry fertilizer material in packages of 80 pounds or less, when not practical to sample according to subsection (2) shall be represented by one unbroken package which will constitute the official sample.
  - (4) Place all cores into sample container and send to the laboratory.
- (b) Sampling Dry Fertilizing Materials in Bulk Lots. Dry bulk material shall be sampled by one of the following methods:
- (1) Use a bulk cup-type sampler with an opening width at least three times the diameter of the largest particle being sampled and long enough to cut the complete stream. The delivery stream must be "cut" with the sampler at least ten times at equal intervals during the delivery.

The registrant mixing the material must supply a safe and convenient access to a stream of the material being loaded for the sampler.

- (2) Use a "Missouri D" probe according to the following system:
  - (i) At least 12 cores must be drawn in different locations.

- (ii) When a single lot of fertilizing material is in two separate compartments, take a minimum of six cores from each compartment.
- (iii) When a single lot of fertilizing material is in three or more compartments, take a minimum of four cores from each compartment.
  - (c) When sampling gypsum, the following procedure is acceptable:
    - (1) Scrape outer surface aside before inserting sampler.
- (2) Take approximately 20 approximately equal cores from fairly evenly distributed parts of the quantity.
- (3) Portions may be taken with a trowel when the material contains large lumps or when for other reasons it is not possible to use a sampler.
- (4) Place all portions into sample container and send to the laboratory for mixing and quartering.
  - (d) Liquid fertilizing materials must be sampled by one of the following systems:
- (1) Full horizontal cylindrical or spherical tanks are sampled with a restricted fill liquid sampling device. Lower the liquid sampler just below the surface and allow to fill, the liquid sampler is then recovered and emptied into a suitable container. This process is repeated twice at the center level of the tank and once at the bottom. All four aliquots are thoroughly mixed and tested; or a sample of the four aliquots consisting of not less than one pint shall be sent to the laboratory for testing.
- (2) Sample vertical cylindrical, cubic or rectangular shaped tanks by proceeding as in "(1)" except one aliquot is taken from the center level rather than taking two aliquots from the center level.
- (3) Nonpressurized nitrogen solutions, nitrogen-phosphate mixtures and other clear solutions may be sampled at the sight gauge or outlet after these openings have been drained and flushed with the solution. Fertilizer suspensions or slurries must be completely agitated before sampling; when a homogenous mixture is achieved, sample as above.
- (4) Streamcutting a homogenous mixture from a valve while loading is an acceptable sampling procedure.
- (5) Small packages of liquid fertilizing materials, when not practical to sample according to subsection (d)(1)(2)(3), shall be represented by one unbroken package which will constitute the official sample.

Authority: Sections 407, 14502 and 14646 of the Food and Agricultural Code.

Reference: Section 14646 of the Food and Agricultural Code.

# 2316. Identification of Official Sample.

A sample of a fertilizing material shall be identified before removal from premises where it was drawn. The identification shall consist of the date; name of product as given on the label, if any; inspector's initials and sample number.

Authority: Sections 407, 14502 and 14645 of the Food and Agricultural Code. Reference: Sections 14645 and 14646 of the Food and Agricultural Code.

#### 2317. Description of Sample.

An inspector's Product Sample Data official form showing pertinent information concerning the sample shall be prepared at the time each official sample is drawn. Where reasonably possible, a label shall be taken from the lot represented by the sample and accompany the inspector's Product Sample Data.

Authority: Sections 407, 14502 and 14645 of the Food and Agricultural Code. Reference: Sections 14645 and 14646 of the Food and Agricultural Code.

# ARTICLE 3. LICENSING

#### 2318. Licensing.

In addition to requirements found in Section 14591 of the Food and Agricultural Code, the following information is required.

(a) A place of business.

Authority: Sections 407, 14502 and 14591 of the Food and Agricultural Code.

Reference: Section 14591 of the Food and Agricultural Code.

# 2319. Experimental Use of a Fertilizing Material.

Experimental use of a fertilizing material for noncommercial value is exempt from licensing.

Authority: Sections 407, 14502 and 14591 of the Food and Agricultural Code. Reference: Sections 14531 and 14591 of the Food and Agricultural Code.

#### ARTICLE 4. REGISTRATION

# 2320. Registration.

In addition to requirements found in Section 14601 of the Food and Agricultural Code, the following information is required.

Each auxiliary soil and plant substance, packaged agricultural mineral, packaged soil amendment and specialty fertilizer shall be registered in the name of the legal entity or person whose name appears on the label before being distributed in this state.

These materials shall not be distributed or sold unless the product is registered.

Authority: Sections 407, 14502 and 14601 of the Food and Agricultural Code.

Reference: Section 14601 of the Food and Agricultural Code.

# **ARTICLE 5. TONNAGE REPORTING**

# 2321. Tonnage Reporting

In addition to the requirements found in Sections 14621, 14622 and 14623 of the Food and Agricultural Code, the following is required.

(a) The tonnage report shall be made semi-annually no later than July 31, and no later than January 31 of each year for tonnage of one ton or greater. Zero reports are not required.

Authority: Sections 407, 14502, 14621, 14622 and 14623 of the Food and Agricultural Code. Reference: Sections 14621 and 14622 of the Food and Agricultural Code.